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EXAMINER

LUONG, ALAN H

ART UNIT	PAPER NUMBER
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2623

NOTIFICATION DATE	DELIVERY MODE
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09/25/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/670,966	Applicant(s) KIM ET AL.	
	Examiner ALAN LUONG	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 2-5, 23-26 and 28-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6-22, 27 and 31-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06/11/2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Art unit is changed into 2623

Response to Amendment

This Office Action is responsive to the Amendment filed on 06/11/2008.

Claim Objections

1. Claims 22 is objected to because of the following informalities: At line 5 of claim recites "operably", it should be misspelled of "operable". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 6-22, 27 and 31-43** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. 2003/0021593 by Otsuka et al.; in view of US Patent No. 6,138,175 issued by deCarmo.

Regarding to claim 1: Fig. 1 of Otsuka illustrates a structure of optical disc player [100] supports **a method for controlling a playback operation in a media player device** as optical disc player [100], **the method comprising:**

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DISPLAY_MODES is **defining a plurality of operating states based on coexisting operation modes of the media player device** as a video playback mode and a user agent mode, **wherein in a first operation mode the device is** the playback mode be **configured to reproduce audio/video (A/V) data recorded on a recording medium [116]** is displayed as screen of Fig. 2A and **in a second operation mode the device is** the user agent mode be **configured to process additional data recorded on a recording medium [116] or provided from a remote content provider** as a network browser is displayed as screen of Fig. 2B (Otsuka, ¶0016, ¶0017-¶0019); and FIG. 4 illustrates a flow diagram of the operations [400] of the optical disc player [100] when the user control interface [114] is activated by a user for **operating the device in** screen state (¶0044, ¶0048), **in response to user interfacing with the device** [i.e. USER_PREF command] (¶0059);

However, Otsuka is silent with “**operating the device at least one of the plurality of operating states wherein the plurality of operating states comprise at least one of N operating states as based on said first and second operational modes; the first operational mode has X playback states associated with reproducing A/V data recorded on the recording medium, the second operational mode has Y operation states associated with processing additional data recorded on a recording medium provided by the remote content provider ,where $N=X \times Y$.**

In an analogous art directed toward a similar problem namely improving the results from **the plurality of operating states**”. DeCarmo teaches a navigation engine (206 of

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FIG.2) which controls DVD player with **plurality of operating states** as commands (e.g. Set, SetSystem, GoTo, Link, Jump or Compare) (DeCarmo, col. 2 lines 36-42) wherein Set command has 11 operations, SetSystem has 5 parameters, GoTo commands are used to skip part of program, Link and Jump commands cause program execution to jump to different locations within menu on the medium, they have 5 Link Instructions and Compare commands (**DeCarmo, col. 2 lines 43-55**).

wherein the plurality of operating states comprise at least one of N operating states as based on said first and second operational modes. In the standard DVD player, **the first operational mode has X playback states associated with reproducing A/V data recorded on the recording medium** i.e. X=3 because player [100] is considered as a regular DVD player which can PLAY, PAUSE and STOP, respectively on Full screen, still video full screen and Blank display (Otsuka, ¶0018)

the second operational mode has Y operation states associated with processing additional data recorded on a recording medium i.e. Y=3 because the player [100] operation is switched to user-agent mode from playback mode if it incorporates with program Function: bool AllowModeSwitch (¶0036) to switch operation mode stored in disc [116] that interacts said first and second operational modes **provided by the remote content provider (¶0020-¶0040)** which can PLAY, PAUSE and STOP.

DeCarmo also teaches the Polymorphism method is a concept which allows objects (a unit A and unit B) and functions which have the same overall format (as PLAY, STILL or PAUSE and STOP) but which work with different data (different modes), to function

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differently in order to produce consistent results at engine [220]. It would have been obvious to one with ordinary skill in the art to use the Polymorphism method to prove N as product sum of 2 different modes as the Playback mode and the user agent mode, each mode has 3 different operations Play, Pause and Stop, where $N = X \times Y$, i.e. $x=3$, $Y=3$, $N=9$ (Fig. 3, col. 6 line 63-col. 8 line 7). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify a optical disc player of Otsuka with the DVD navigational command as taught by DeCarmo, in order to provide a need exists for a system in which commands may be executed in parallel to accelerate command execution.

Regarding to claim 6: The method of claim 1, Fig. 2A of Otsuka shows **wherein the first operational mode comprises at least one of play**, the optical disc player 100 of the invention operates as a standard DVD player which has **playback states associated with reproduction of the A/V data**. (Otsuka, ¶¶0018 and ¶ 0046-0052).

Regarding to claim 7: The method of claim 6, Fig. 2B of Otsuka shows **wherein the second operational mode comprises at least one of play**, the HTML menu controls the playback of the video content stored on the local optical disc 116. (Otsuka, ¶¶0019)

Regarding to claim 8: The method claim 7, with respect to the claimed “**wherein the operating step includes playing back A/V data from the recording medium and displaying additional data received from the recording medium or the remote content provider in association with the A/V data, if the first operational mode is in a play state and the second operational mode is in a play state**” is met by Otsuka

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teaches the DISPLAY_MODE display_mode variable specifies the display mode of the optical disc player 100; If the DISPLAY_MODE display_mode value is DISPLAY_PIC_IN_PIC, then the displaying device coupled to the video/audio device interface 112 displays video playback mode and/or user agent mode in picture-in-picture format (Otsuka, ¶0055, ¶0056).

Regarding to claim 9: The method claim 7, with respect to the claimed “**wherein the operating step includes displaying a still picture of a A/V data from the recording medium and displaying additional data received from the recording medium or the remote content provider in association with the A/V data, if the first operational mode is in a still state and the second operational mode is in a play state**” is met by the DISPLAY_MODE display_mode variable specifies the display mode of the optical disc player 100, If the DISPLAY_MODE display_mode value is DISPLAY_WEB_IN_WINDOW, then the displaying device coupled to the video/audio device interface 112 displays the user agent menu in a window over the video playback menu; (see Otsuka, ¶0056).

Regarding to claims 10, 11: The method claim 7, with respect to the claimed “**wherein the operating step includes discontinuing the playback of A/V data and displaying additional data received from the recording medium or the remote content provider in association with the A/V data and the displaying step displays the additional data in full screen mode and no A/V data is displayed, if the first operational mode is in a stop state and the second operational mode is in a play state**” is met by the DISPLAY_MODE display_mode variable specifies the display mode

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of the optical disc player 100, if the DISPLAY_MODE display mode value is DISPLAY_WEB_FULLSCREEN, then the displaying device coupled to the video/audio device interface 112 displays the full screen user agent menu; (Otsuka, ¶0056) .

Regarding to claims 12-14, 18 and 19: In the method of claim 1, Otsuka discloses wherein if the first operational mode is in a play state and the second operational mode is in an idle state, then the device plays back the A/V data and the device temporarily discontinues receiving additional data from the enhanced navigation medium or the remote content provider in association with the A/V data and the device plays back A/V data in full screen mode.

(the DISPLAY_MODE display_mode variable specifies the display mode of the optical disc player 100, if the DISPLAY_MODE display mode value is DISPLAY_VID_FULLSCREEN, then the displaying device coupled to the video/audio device interface 112 displays the full screen video playback menu; see ¶0056).

Regarding to claims 15 and 16: In the method of claim 1, Otsuka discloses wherein if the first operational mode is in a still state and the second operational mode is in an idle state, then the device temporarily discontinues playing back the A/V data and the device temporarily discontinues receiving additional data from the enhanced navigation medium or the remote content provider in association with the A/V data and the device displays a still image of the last A/V data displayed.

(the DISPLAY_MODE display_mode variable specifies the display mode of the optical disc player 100, if the DISPLAY_MODE display mode value is DISPLAY_VID_IN

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WINDOW, then the displaying device coupled to the video/audio device interface 112 displays the video playback menu over the user agent menu; see ¶0056).

Regarding to claim 17: In the method of claim 1, Otsuka discloses wherein if the first operational mode is in a stop state and the second operational mode is in an idle state, then the device discontinues playing back the A/V data and the device temporarily discontinues receiving additional data from the enhanced navigation medium or the remote content provider in association with the A/V data (DISPLAY_MODE display_mode variable specifies the display mode of the optical disc player 100; If the DISPLAY_MODE display_mode value is DISPLAY_WEB_IN_WINDOW, then the displaying device coupled to the video/audio device interface 112 displays the user agent menu in a window over the video playback menu; see ¶0056).

Regarding to claim 20: The method of claim 7, with respect to the claimed “**wherein the operating step includes temporarily discontinuing a playback of the A/V data and discontinuing a receiving of additional data from the recording medium or the remote content provider in association with the A/V data, if the first operational mode is in a pause state and the second operational mode is in a stop state**” is met by the DISPLAY_MODE display_mode variable specifies the display mode of the optical disc player 100; If the DISPLAY_MODE display_mode value is DISPLAY VID_IN WINDOW, then the displaying device coupled to the video/audio device interface 112 displays the video playback menu over the user agent menu; see ¶0056)

Regarding to claim 21: The method of claim 7, with respect to the claimed “**wherein the operating step includes discontinuing a playback of the A/V data and discontinuing a receiving of additional data from the recording medium or the remote content provider in association with the A/V data, if the first operational mode is in a stop state and the second operational mode is in a stop state**” is met by Otsuka teaches the operations 300 of the optical disc player 100 as a result of the execution of the various functions which associate with the DISPLAY_MODE display_mode variable. It would have been obvious the displaying device could not coupled to the video/audio device interface 112 displays the full screen playback menu and the device discontinues receiving additional data from the enhanced navigation medium or the remote content provider in association with the A/V data; then it has been obvious the displaying device could not coupled to the video/audio device interface 112 displays the full screen user agent menu. (See ¶0056).

Regarding to claim 22: Fig. 1 of Otsuka illustrates a block diagram of **an enhanced media player [100], comprising:**
a playback engine [block 104] configured to reproduce A/V data from a recording medium [116]; an enhanced navigation engine [stored program in storage 116] configured to reproduce additional data from the recording medium [116] or a remote content provider through network interface [110] and a controller [102] operable coupled to the playback engine and the enhanced navigation engine and configured to control the reproducing of the A/V data and/or additional data, (Otsuka, ¶0016-¶0017) wherein the controller is further configured to control a

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plurality of operating states merely repeats the same function components of claim 1, claim 22 must also be anticipated by Otsuka et al. (**see claim 1 rejection**).

Regarding to claim 27: The player of claim 22, merely repeats the same function components of claim 6 and 7 combination, claim 22 must also be anticipated by Otsuka et al. (**see claim 6 and 7 rejection**).

Regarding to claim 31: The player of claim 27, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the BUTTON switch (¶0044), **“including playing back A/V data from the recording medium and displaying additional data received from the recording medium or the remote content provider in association with the A/V data, if the first operational mode is in a play state and the second operational mode is in a play state”** merely repeats the same function components of claim 8, claim 31 must also be anticipated by Otsuka et al. (**see claim 8 rejection**).

Regarding to claim 32: The player of claim 27, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the BUTTON switch (¶0044), with respect to the claim 32 merely repeats the same function components of claim 9, claim 32 must also be anticipated by Otsuka et al. (**see claim 9 rejection**).

Regarding to claims 33, 34: The player of claim 27, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the BUTTON switch (¶0044), with respect to the claim 33, 34 merely repeat the same

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function components of claim 10 and 11, claim 33, 34 must also be anticipated by Otsuka et al. (**see claim 10, 11 rejection**).

Regarding to claim 35: The player of claim 27, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the BUTTON switch (¶0044), with respect to the claim 35 **“including playing back the A/V data and continuing a receiving of additional data from the recording medium or the remote content provider in association with the A/V data while discontinuing a displaying of the additional data, if the first operational mode is in a play state and the second operational mode is in an idle state”** is met by Otsuka the DISPLAY_VID_FULLSCREEN (Play_playback state alone, disable the user state); (see ¶0055, ¶0056).

Regarding to claim 36: The player of claim 27, with respect to the claim 36 merely repeat the same function components of claim 21, claim 36 must also be anticipated by Otsuka et al. (**see claim 21 rejection**).

Regarding to claim 37: The player of claim 36, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the BUTTON switch (¶0044), with respect to the claim 37 **wherein the controller is configured to control the playback engine to display a still image of the last A/V data displayed**.

Regarding to claim 38: The player of claim 27, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the

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BUTTON switch (¶0044), with respect to the claim 38 merely repeat the same function components of claim 21, claim 38 must also be anticipated by Otsuka et al. (**see claim 21 rejection**).

Regarding to claim 39: The player of claim 27, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the BUTTON switch (¶0044), with respect to the claim 39 merely repeat the same function components of claim 35, claim 38 must also be anticipated by Otsuka et al. (**see claim 35 rejection**).

Regarding to claim 40: The player of claim 27, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the BUTTON switch (¶0044), with respect to the claim 40 merely repeat the same function components of claim 20, claim 40 must also be anticipated by Otsuka et al. (**see claim 20 rejection**).

Regarding to claim 41: The player of claim 27, Fig. 4 of Otsuka indicates **wherein the controller [102] is configured to control the operating state** when user activates the BUTTON switch (¶0044), with respect to the claim 41 merely repeat the same function components of claim 21, claim 41 must also be anticipated by Otsuka et al. (**see claim 21 rejection**).

Regarding to claim 42: The player of claim 22, further comprising:

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Fig. 1 of Otsuka illustrates [110] as **a communication interface configured to communicate with the remote content provider to receive the additional data** (§0016, §0017, §0019).

Regarding to claim 43: The player of claim 42, further comprising:

Fig. 1 of Otsuka illustrates [106 or 108] **as a data storage configured** by processor [102] **to store the additional data** as a program interpreter **from the remote content provider** as web browser or internet **or from the recording medium** as local disc [116]. (§0005, §0016).

Response to Arguments

Applicant's arguments filed June 11, 2008, have been fully considered but they are not persuasive see discussion below:

The applicant respectfully notes that: deCarmo does not disclose or suggest a second operational mode that has Y operation states associated with processing additional data recorded on the recording medium or provided by the remote content provider, where $N = X \times Y$. In rejecting claim 5, the Official Action points generally to 2 columns of text without providing a specific citation to any particularly passage that allegedly describes the above-identified feature.(Remark, page 20)

Examiner respectfully disagrees in response: the Previous Action admits that "Otsuka teaches a user agent mode as **a second operation mode** that has Y operation states associated with processing additional data recorded on the recording medium (see

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provided updated rejection of claim 1), but fails to teach a plurality of the operating states” and DeCarmo clarifies a **plurality of operating states** as commands (e.g. Set, SetSystem, GoTo, Link, Jump or Compare) (**DeCarmo, col. 2 lines 36-42**) wherein Set command has 11 operations, SetSystem has 5 parameters, GoTo commands are used to skip part of program, Link and Jump commands cause program execution to jump to different locations within menu on the medium, they have 5 Link Instructions and Compare commands (**DeCarmo, col. 2 lines 43-55**). Addition, DeCarmo also clarifies the Polymorphism method is a concept which allows objects (a unit A and unit B) and functions which have the same overall format (as PLAY, STILL or PAUSE and STOP) but which work with different data (different modes), to function differently in order to produce consistent results at engine [220] (**Fig. 3, col. 6 line 63-col. 8 line 7**).

Polymorphism method is well-known in the art to combine sum of 2 different objects, each object has X and Y functions with the same format, respectively. It would have been obvious to one with ordinary skill in the art to use Polymorphism method to prove $N=X.Y$ as respect to previous claim 5.

With above disagreements; examiner will maintain the same rejection to make final with providing updated rejection.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALAN LUONG whose telephone number is (571)270-5091. The examiner can normally be reached on Mon.-Thurs., 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALAN LUONG/
Examiner, Art Unit 2623
Sept 18, 2008

/Scott Beliveau/

Supervisory Patent Examiner, Art Unit 2623